



## SHAPING THE FUTURE ... TOGETHER

### EXECUTIVE SUMMARY

### GUAM AND CNMI MILITARY RELOCATION DRAFT EIS / OEIS VOLUME 2: MARINE CORPS ACTIONS

#### Focus

The proposed action is the construction and operation of all required facilities, infrastructure, and training assets necessary to establish a Marine Corps base of operations on Guam. The Marine Corps would relocate approximately 8,600 Marines and their 9,000 dependents from Okinawa to Guam. The four functional components of the proposed action are:

- **Main cantonment area functions**—base operations and support;
- **Training functions**—firing ranges, non-fire maneuver ranges, and aviation training;
- **Airfield functions**—aviation units and aviation support units that require runway and hangar space and maintenance, supply and administrative facilities; and
- **Waterfront functions**—transient ships and assault craft.

Four alternatives for the Main Cantonment were carried forward in the Draft Environmental Impact Statement (EIS) / Overseas Environmental Impact Statement (OEIS) for analysis. The most substantial differences between the alternatives relate to the orientation of the main cantonment area functions. The primary driver for selecting or eliminating alternatives from further evaluation was compatibility with surrounding land uses and the importance of the Guam National Refuge Overlay Units as essential habitat for endangered species. Alternative 2 is the Preferred Alternative in which 680 acres of privately held land would be acquired with 41% of Main Cantonment developed in the Overlay Refuge. All facilities would be on one contiguous parcel of land.

There are two potential action alternatives for the live-fire range complex. In Training Range Complex Alternative A, the Preferred Alternative, all required ranges are at a location east of Andersen South on non-Department of Defense (DoD) land to the east of Route 15.

#### Key Actions

Land acquisition and use is a primary concern raised by the citizens of Guam. The issues identified during the public scoping process included:

- no increase in federal land; no re-acquisition of lands that have been or are being released from the federal government;
- consistency of federal land use with GovGuam land use plans;
- current public rights of ways would be retained;
- no further restrictions on submerged land recreational uses (outer Apra Harbor specific area of concern); and
- release of South Finegayan and Andersen South.

Main Cantonment Alternative 2 (Preferred Alternative) and Alternative 8 would require the acquisition of the former Federal Aviation Administration (FAA) property only. Alternative 8 is similar to Alternative 2 with the exception that the housing and community support facilities are divided up between the west and east areas of Guam. In Alternative 1, both the former FAA and Harmon parcels (northern Guam) would be acquired by the DoD. This alternative would also limit access to the Guam Land Use Plan (GLUP) 77 parcel. The former FAA parcel on the northeast coast of Guam is controlled by Guam Ancestral Land Commission (GALC) (approximately 520 acres) and several members of one family (160 acres). The Harmon parcel was released from federal land inventory and is under the control of the Guam Excess Land Act 1994. The GLUP 77 parcel is currently being processed for transfer to GovGuam.

The intensity of land use at Naval Computer and Telecommunications Station (NCTS) Finegayan and South Finegayan would increase over existing conditions. Under all alternatives, Andersen South would remain under federal control. This area is proposed for a non-firing training area, which is consistent with proposed residential land use on adjacent property. It would remain largely open space.

Both Training Range Complex Alternatives A and B require the acquisition of non-federal land located east of Route 15 and Andersen South (central Guam). This would result in a significant impact to property owners that do not want to sell to the federal government. Alternative B requires more land acquisition or long-term leasing than Alternative A. No pockets of non-federal land would be created, but there would be new restrictions on public access. Access to historic sites, hiking trails and beach areas would require DoD approval and would be limited to periods of no training. Both alternatives require the relocation of the International Raceway Park and residences. The ranges would be tightly configured and overlapping Surface Danger Zones (SDZs) would result in a smaller combined SDZ area. Live munitions training is not consistent with the planned residential land use at or adjacent to Route 15. However, most of the area required to accommodate the SDZ would be undeveloped and remain open space, thereby minimizing the impact.

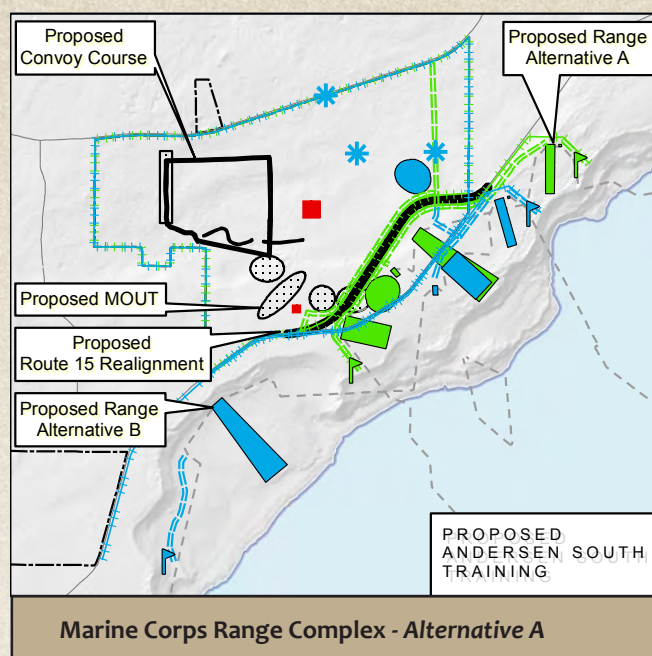
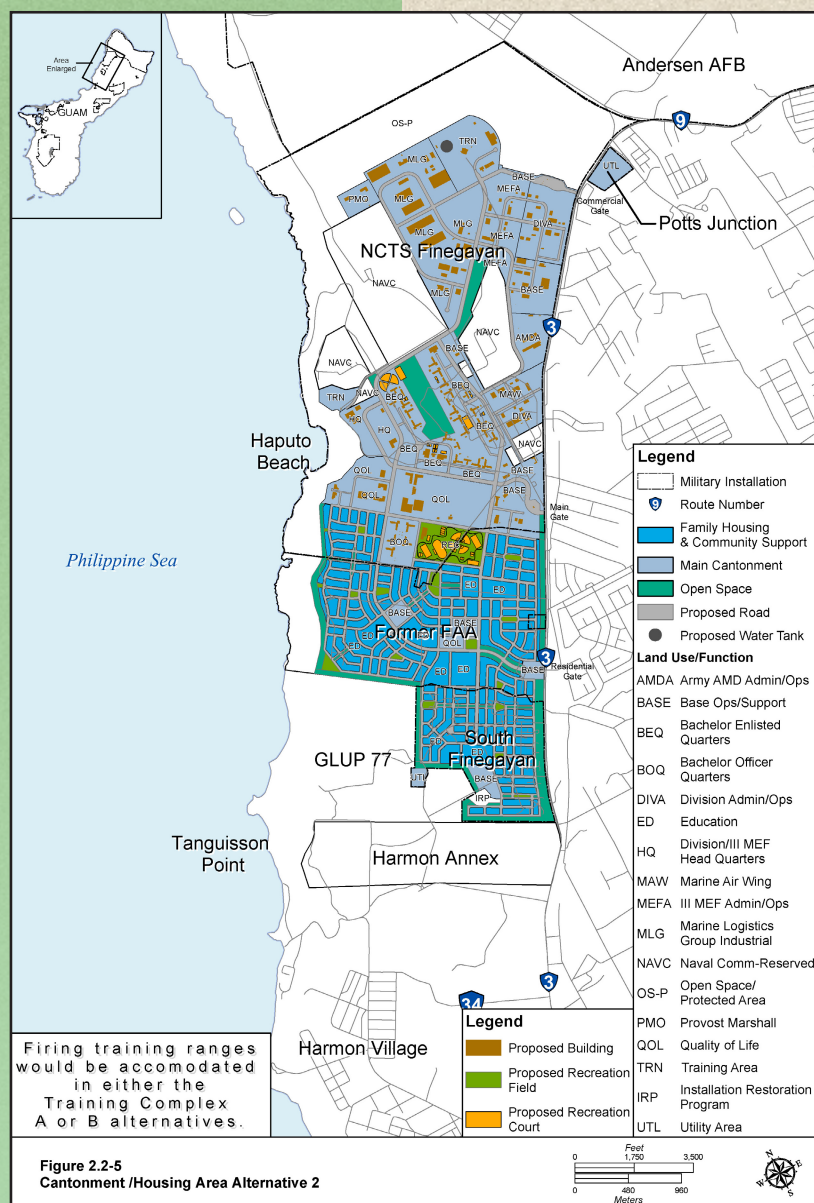


## Key Observations

Observation/ Issue	Comment
<b>Preferred Alternative - Main Cantonment Alternative 2</b> <ul style="list-style-type: none"> <li>680 acres of privately held land would be acquired.</li> <li>41% would be developed in the Overlay Refuge.</li> <li>All facilities would be on one contiguous parcel of land, including the family housing area.</li> </ul>	Informational
<b>Training Range Complex Alternatives</b> <ul style="list-style-type: none"> <li>Both Alternatives A and B require acquisition of non-federal land located east of Route 15 and Andersen South, resulting in a significant but mitigable impact on land ownership.</li> <li>Alternative B requires more land acquisition or long-term leasing than Alternative A, and would encumber a larger area of submerged lands.</li> <li>Access to property associated with either alternative would be limited to authorized personnel throughout most of the year.</li> <li>No pockets of non-federal land would be created, but there would be new restrictions on public access.</li> <li>Access to historic sites, hiking trails and beach areas would require DoD approval and would be limited to periods of no training.</li> <li>No acquisition of submerged lands is proposed; however, the proposed firing ranges on the property would generate SDZ that extend into the submerged lands and access would be restricted during training events, which would occur most of the year.</li> </ul>	<p>Both training alternatives result in the acquisition of non-DoD property. In Alternative A, Route 15 would be relocated but result in less acquisition. While public access would be severely limited because of the firing training activities, the land use would remain relatively open.</p> <p>These impacts are adverse and contrary to the issues identified at the public scoping.</p>
<b>Waterfront Functions</b> <ul style="list-style-type: none"> <li>Navy leases the Former Ship Repair Facility (SRF) area, located on the western side of the Inner Apra Harbor Channel, to the Guam Economic Development and Commerce Authority (GEDCA) who subleases it to Guam Shipyard. The current lease expires in 2012; future use of the SRF lands beyond 2012 is currently being reviewed by the Navy.</li> </ul>	Informational
<b>Land Acquisition</b> <ul style="list-style-type: none"> <li>Acquisition of the Former FAA parcel would be a significant impact on land ownership if the landowner were forced to sell or relocate, or if access to the site would be restricted to authorized personnel.</li> <li>The former FAA parcel is on the northeast coast of Guam and is controlled by GALC (approximately 520 acres) and several members of one family (160 acres).</li> <li>A beneficial land use impact would be the elimination of the existing gap between NCTS Finegayan and South Finegayan and the formation of a contiguous base.</li> <li>The impacts of the proposed island-wide increase in federal land are being addressed in the Land Acquisition Impact Study portion of the Socioeconomic Impact Assessment Study that is being developed and will be available as part of the Final EIS.</li> </ul>	Acquisition of non-DoD lands for Alternatives 1, 2, and 8.
<b>Issues Raised During Scoping process:</b> <ul style="list-style-type: none"> <li>No Increase in Federal Lands. An increase is considered an adverse impact by some members of the public.</li> <li>Some owners are interested in sale.</li> <li>No re-acquisition of lands that have been or are in the process of being released by the federal government.</li> <li>All land uses proposed on federal land would be consistent with GovGuam land use plans. Specifically, civilian housing should not be adjacent to industrial or training uses on the Base Yigo and Dededo.</li> <li>Federal government would release South Finegayan and Andersen South.</li> <li>Current public rights of way would be retained.</li> <li>No further restrictions on submerged lands recreational uses. Current restrictions have interfered with boat races and competitions in Outer Apra Harbor.</li> </ul>	Concerns of the public.
<b>Land Acquisition</b> <ul style="list-style-type: none"> <li>The approach to the Alternatives analysis assumes the forced sale of land by the federal government for the firing range complex and roadway improvements.</li> </ul>	None of the alternatives address all of the concerns of the public identified during scoping.
<b>Land Acquisition Mitigation Measure</b> <ul style="list-style-type: none"> <li>Mitigation for the taking of property that is not acceptable to the landowner may be a long-term lease agreement instead of purchase where the property returns to the owner on termination of the lease.</li> </ul>	Mitigation measure is to agree to a long-term lease rather than acquisition.
<b>Land Use Significance Criteria Used in Selecting Preferred Alternatives</b> <ul style="list-style-type: none"> <li>Consistency with Farmland Protection Policy Act (FPPA)</li> <li>Consistency with current or documented planned land use</li> <li>Restrictions on access [restrictions on public access would be a potential adverse impact and physical access restrictions could be significant on private adjacent landowners].</li> </ul>	Criteria used to determine if the impacts to land use are significant coincide with issues identified during the public scoping process.
<b>Land Use</b> <ul style="list-style-type: none"> <li>Under all alternatives Andersen South would remain under federal control.</li> <li>This area is proposed for a non-firing training area, which is consistent with proposed residential land use on adjacent property, and would remain largely open space.</li> </ul>	Informational
<b>Impacts to Water Resources</b> <ul style="list-style-type: none"> <li>Groundwater production is expected to increase by a total of no more than approximately 16.2 million gallons per day (MGd) from the Gana, Mangilao, Andersen, Agaña-Gumas, Finegayan, and Yigo-Tumon subbasins.</li> <li>The new projected pumping rate of 54.7 MGd would still be less than the sustainable yield of 80.5 MGd.</li> <li>The Navy recently initiated a study to re-evaluate the sustainable yield of the Northern Guam Lens Aquifer (NGLA). The results of the re-evaluation will be incorporated into future versions of the EIS/OEIS.</li> </ul>	The use of water resources is a concern; however based on the information currently known, the use should be significantly below the sustainable yield. A re-evaluation is proposed.

Observation/ Issue	Comment
<b>Impacts to Air Quality</b> <ul style="list-style-type: none"> <li>The local government of Guam has not collected ambient air quality data since 1991.</li> <li>No existing ambient air quality data is available to represent current air quality conditions with respect to the criteria pollutants for which the National Ambient Air Quality Standards (NAAQS) were established.</li> </ul>	<p>It is difficult to determine significance of air quality issues without current ambient air quality data. There are significant pollutants currently being emitted from power facilities.</p>
<b>Impacts to Recreational Resources</b> <ul style="list-style-type: none"> <li>Nearly 17,600 potential users to the existing recreational resources.</li> <li>Reduction of recreational opportunities at existing facilities as more users compete for recreational use.</li> <li>Accelerated general wear and tear of amenities and recreational resources.</li> <li>Prepare a Recreational Carrying Capacity Analysis Management Plan that addresses recreational user use, demand, preference, conflicts, and conditions.</li> </ul>	<p>Commitment by the DoD to mitigate impacts with the construction of numerous recreational facilities.</p>
<b>Potential Mitigation Measures for Recreational Resources</b> <ul style="list-style-type: none"> <li>To meet the demands of the Marines, dependents and civilian workers, the Marine Corps Community Service (MCCS) is proposing a wide range of Quality of Life (QOL) facilities. Examples of proposed uses include: hobby shop, indoor physical fitness centers, indoor recreational resources, youth center, theater, and recreational pavilion. By presenting alternate recreational options to the potential users, impacts to the recreational resources on DoD and non-DoD lands could be lessened.</li> <li>DoD offers resources in form of time and donation or use of equipment to assist the volunteer conservation officer at Andersen AFB.</li> <li>DoD collaborates with the Guam Division of Aquatic and Wildlife Resources (GDAWR) to establish outreach and docent programs for the five marine preserves and other environmentally sensitive areas on Guam.</li> <li>Marine Corps could provide for improvement and maintenance of Tanguisson Beach along with the management of the coastline to the north of Hilaan that contains significant natural, cultural, scenic and recreational resources.</li> </ul>	<p>DoD potential mitigation including actions required by GovGuam.</p>
<b>Impacts to Archaeological Sites and Architectural Resources</b> <ul style="list-style-type: none"> <li>Extensive data collection and surveys associated with the EIS examined more than 5,000 acres in Guam and recorded 100 National Register of Historic Places (NRHP)-eligible archaeological sites and architectural resources.</li> <li>The impact analysis identified significant adverse impacts to between 20 and 35 NRHP-eligible archaeological and architectural resources and traditional cultural properties.</li> <li>Most of the impacts would occur on DoD lands.</li> <li>Potential mitigation measures to reduce those impacts to less than significant levels include data recovery, implementation of preservation plan, public education, signs, brochures, and documentation.</li> </ul>	<p>Most impacted cultural resources are on DoD lands. Several potential mitigation measures are identified including items for GovGuam.</p>
<b>Impacts to the Visual Environment</b> <ul style="list-style-type: none"> <li>The mostly vegetated parcels and relatively open visual character of the land in the action areas would be completely transformed into a densely developed area with numerous buildings, roads, parking lots, sidewalks, and landscaping.</li> <li>Mitigation measures would include implementing a landscape plan focused on retention of mature specimen trees during construction, the establishment of a full suite of vegetation in keeping with Guam's native flora, and using native flora to create a natural-appearing "screen" around the cleared range areas, outside of the firebreaks/perimeter roads.</li> </ul>	<p>Best Management Practices (BMPs) required for design and operation to reduce the impact to the visual environment.</p>
<b>Socioeconomic Impacts</b> <ul style="list-style-type: none"> <li>Anticipated to be largely island-wide in nature with little difference among the various alternatives.</li> <li>Most impacts are characterized by a burst of activity and impacts in the 2013-2014 time frame, followed by relatively much lower impacts when construction ends.</li> </ul>	<p>Peak and decline to the socioeconomic impacts.</p>
<b>Socioeconomic Impacts</b> <ul style="list-style-type: none"> <li>Most long-term economic impacts would be beneficial, though the construction boom would entail substantial growing pains related to rapid population influx and housing shortages. These impacts combined with others such as increased noise and traffic, would substantially impact quality of life on Guam for several years, until the steady-state military operational phase is in place.</li> <li>Including all the indirect impacts, the proposed action would provide jobs for about 33,000 civilian workers at the 2014 peak and approximately 6,150 on a more permanent basis. Guam residents are estimated to capture about 2,000 of the direct on-site construction jobs for Marine Corps facilities at the 2013-2014 peak as well as approximately 2,570 jobs created from the spending of on-site workers that year, with a slight decline thereafter.</li> </ul>	<p>The construction phase will clearly be the most detrimental to the quality of life on Guam. Shortages of housing and other resources could be the norm for many years. The cost of living could increase because the demand for resources. GovGuam will have to plan for the boom and ensure that housing and other resources are not over-built leading to under-utilization in the future.</p>
<b>Socioeconomic Impacts</b> <ul style="list-style-type: none"> <li>While the proposed action has the potential to have substantial beneficial economic impact to the Island of Guam during the operational phase, the large increase and subsequent rapid decrease in construction-related population in tandem with an increase in operational population increase means that the proposed action creates a boom-bust economic cycle on Guam that strains public services during the boom and could result in a recession-like environment following the construction phase.</li> </ul>	<p>GovGuam will need to collaborate closely with DoD on the timing of construction and relocation of the dependents in order to minimize the boom effect.</p> <p>Many mitigation methods include DoD assistance to GovGuam in seeking federal funding. This puts a tremendous burden on GovGuam to compete for the limited resources of other federal agencies in order to mitigate impacts to resources on Guam.</p>





### Assessment

In all resource areas, any number of commitments are made to minimize or mitigate impacts from the action alternatives. These commitments include many Best Management Practices (BMPs) related to design, construction, and operation of the proposed facilities. As well, there are proposed mitigation measures both within the DoD's control and out of the DoD's control. It is important that the government of Guam ensure these commitments are kept in order to maintain the quality of life for the citizens of Guam.

The impact on GovGuam and its ability to provide services to the citizens of Guam is significant, particularly in the short term during construction. The challenges facing GovGuam include the ability to provide qualified staff to meet the service needs of the community as well as the

financial resources to upgrade the services required. These challenges are further complicated by the need to quickly ramp up to accommodate the peak construction demand during the 2013 and 2014 period, then cut back to levels required to accommodate the steady-state military operational phase. The proposed buildup has the potential to provide a substantial beneficial economic impact to the island of Guam. However, the boom-bust economic cycle will strain public services during the boom and could result in a recession-like environment following the construction phase. Many of the mitigation methods proposed, include assistance to GovGuam from DoD in seeking federal funding from other agencies. This clearly puts tremendous pressure on GovGuam to obtain federal funding from other federal agencies that have competing demands. Without these funding sources, the economic impacts as well as impacts to the resource areas could be significant and adverse. The impact analysis accounts for many of these mitigation measures; therefore, a very different impact scenario could evolve without these funding sources.



Office of the Governor of Guam  
P.O. Box 2950  
Hagåtña, Guam 96932  
(671) 472-8931

Your questions and comments are welcome.  
Please visit the website at [www.one.guam.gov](http://www.one.guam.gov).

Definitions for terms and acronyms used in this and other related reports can be found in the *Acronym Guide and Glossary* at [www.one.guam.gov](http://www.one.guam.gov).